

AMENDMENTS TO THE DRAWINGS:

The attached sheet of drawings includes changes to Figs. 6 and 7.

Attachments: One Replacement Sheet - Figs. 1-7.

REMARKS

In response to the above Office Action, the drawings have been amended to include reference numerals 6 and 7 and the specification amended to include these reference numerals where appropriate.

In addition, the specification has been amended to include subheadings as required by Rule 77(b) and to correct the typographical error on page 11. A new Abstract on a separate sheet of paper in compliance with M.P.E.P § 608.0(b) is also attached.

Finally, claims 1 and 2 have been amended to more clearly claim Applicant's invention and to place the claims in more traditional U.S. format. Support for the amendments can be found, for example, on page 8, lines 14-21 of the specification. Claims 3-11 have been withdrawn in response to the Restriction Requirement, but consideration of their rejoinder once the process claims are allowable is requested.

In the Office Action, the Examiner rejected claims 1 and 2 under 35 U.S.C. § 103(a) for being obvious over Dolan et al. (US 6,220,256) in view of Yeung (US 5,415,939) and Rogers (US 3,303,252).

Dolan discloses the known steps of extrusion, stretching heating and cutting PTFE to form a PTFE filament, which steps now are in the preamble of amended claim 1. As acknowledged by the Examiner, Dolan does not teach any of the claimed method steps of forming the billet prior to extrusion.

The Examiner, therefore, cites Yeung relating to PTFE tapes and its disclosure of perform 1 of cylindrical shape made up of two mixtures M1 and M2 as shown in FIG. 2 of the reference. While the perform 1 of Yeung may look like the billet 5 of the

invention, as shown in Fig. 5 it is clear from the reference that it is made by quite a different process.

In Applicant's process, as set forth in claim 1, the two mixtures are fed to separate portions of a receptacle having a barrier that separates the receptacle into the two portions so that the first and second mixtures inside the receptacle are side by side and aligned with the side walls of the receptacle as shown in Fig. 3. Thereafter, the barrier is removed thereby enabling a part of one mixture to contact a part of the second mixture and be arranged side by side and aligned with the side walls of the receptacle as shown in Fig. 4. The mixtures are subsequently pressed to form a billet.

In contrast, in Yeung half of the mold 13 is blocked with a semicylindrical mandrel 17 while a first mixture M1 is filled into the mold and compacted. Thereafter the mandrel is removed and the void left filled with the other mixture M2. The mixtures are not fed to separate portions of a receptacle having a barrier that separates the receptacle into two portions as claimed. This provides a less complex and more efficient method for forming the billet or perform because the two mixtures can be fed to the receptacle simultaneously or near simultaneously. This would not be possible in Yeung, because first the mandrel 17 has to be removed from the mold before the second mixture can be fed to it.

Moreover, in Yeung the first mixture M1 is compacted (Fig.3b) before the second mixture M2 is fed to the mold. Thus the mixture M1 is compacted twice and mixture M2 once so that they will necessarily be compacted to different degrees. In contrast in the present invention both mixtures are compacted or pressed simultaneously allowing them to be equally compacted.

The Examiner apparently recognizes this difference in Yeung and, therefore, cites Rogers noting the description in column 1, lines 25-30 that "The varicolored perform is produced by pouring masses of loose Teflon powder into a cylinder having pie-shaped dividers to segregate powders of different pigmentation, removing the dividers and then compressing the several masses to produce a solid perform having sectors of the different colors." The Examiner then argues that the removable divider (of Rogers) and the removeable mandrel (of Yeung) are "functional equivalents for arranging the mixtures," and therefore, that it would be obvious to "combine" the teachings of Rogers with those of Dolan and Yeung.

First of all, it is noted that this is a discussion of the prior art in Rogers, and it is not a description of the invention actually being disclosed in the reference. It is quite vague and there is no relevant drawing to explain it. Moreover, in the discussion that follows in column 1, lines 31-35, it teaches that the method is no longer satisfactory for its intended purpose. Consequently, it is highly unlikely that one skilled in the art would have considered this an alternative to the process described in Yeung for forming a perform for extruding a PTFE filament. Any suggestion to use this method comes from hindsight based on a reading of Applicant's specification and not from anything taught by this reference.

While the Examiner bases his position on the fact the teachings of Rogers and Yeung are "functional equivalents," they, in fact, are not because Yeung's method requires the use of a mandrel(s) whereas Rogers does not. In Yeung, after mixture M1 is placed in the mold, the upper part of the mold is closed off and the mixture M1 is compressed by plunger 14 (column 4, line 65 to column 5, line 2). The presence of

mandrel 17 in the mold at that time is necessary to prevent mixture M1 from entering into the space or spaces to be occupied by other mixtures. Only after mixture M1 has been pressed and is now a stable structure is mandrel 17 removed. As noted in column 2, line 10, this is true even if a number of mandrels are used to produce performs made up of more than two mixtures. Thus it is clear Yeung requires mandrels in the method described, but if the method is to be replaced by the filling technique of Rogers as argued by the Examiner, then the mandrels would be eliminated as would the step-wise compacting of the mixtures as required by Yeung.

As noted in M.P.E.P § 2143.01VI, "If the proposed modification of the prior art would change the principle of operation of the prior art invention being modified then the teachings of the references are not sufficient to render the claims prima face obvious" (Emphasis added). It is submitted that substituting the filling technique of Rogers for the filling technique of Yeung would alter the principle of operation of Yeung's invention, so it is not proper to make this substitution.

Reconsideration of the rejection of claims 1 and 2 for being obvious under § 103(a) over Dolan in view of Yeung and Rogers and allowance of the claims is therefore requested.


In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account 06-0916.

Respectfully submitted,

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Dated: March 7, 2011

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Attachments: New Abstract
One Replacement Sheet - Figs. 1-7

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